



# Abstract 7. Prospective, Double-Blind Evaluation of Umbilical Reconstruction of Techniques Using Conventional and Crowdsourcing Methods

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**METHODS:** From 2005–2016, 1,000 consecutive patients underwent rhytidectomy by the senior author (LPB). In addition to implementing cannula lipodissection, the senior author avoids routine anterior platysmaplasty as it was observed to limit jowl excursion of the lower face. In an attempt to validate the abovementioned approach (developed from clinical observation), a cadaveric study was performed on five fresh tissue cadavers. Post-auricular skin excursion was measured following lipodissection (cannula only) and then measured again after traditional wide undermining. Next, SMAS flap and jowl excursion were measured with and without anterior platysmaplasty. A force gauge was utilized to ensure that equivalent force was applied during all comparisons of skin and SMAS excursion.

**RESULTS:** Cannula lipodissection resulted in a mean skin excursion of 41.9mm. There was no significant difference in skin excursion compared to wide undermining (41.9 versus 42.1mm;  $p=0.785$ ). Jowl position, in reference to the mandibular border, was significantly lower following anterior platysmaplasty (18.3 versus -3.4mm;  $p=0.005$ ). Anterior platysmaplasty; however, did not adversely affect the excursion at the tip of the high lateral SMAS flap (39.3 versus 37.9mm;  $p=0.644$ ).

**CONCLUSION:** Cannula lipodissection results in equivalent skin recruitment in comparison to wide undermining. Routine anterior platysmaplasty may compromise results by inhibiting jowl excursion.

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## PROSPECTIVE, DOUBLE-BLIND EVALUATION OF UMBILICAL RECONSTRUCTION OF TECHNIQUES USING CONVENTIONAL AND CROWDSOURCING METHODS

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Boston, MA, USA.*

**PURPOSE:** Umbilicoplasty is an important component of deep inferior epigastric perforator (DIEP) flap breast reconstruction.

This study evaluated the aesthetics of three different umbilical reconstruction techniques in DIEP flap reconstruction.

**METHODS:** From January-April 2013, 23 patients underwent DIEP flap breast reconstruction and intra-operatively they were randomized to receive one of three umbilicoplasty types: a diamond ( $n=7$ ), oval ( $n=7$ ), or 'inverted V' incision ( $n=9$ ). Plastic surgeons and members of the general public, identified using an online 'crowdsourcing' platform, evaluated aesthetic outcomes in a blinded fashion. Reviewers were shown pre- and post-operative photographs of the umbilicus of all 23 patients and a four-point Likert scale enabled them to rate the new umbilicus on the size, scar formation, shape, localization and overall appearance.

**RESULTS:** Results for six plastic surgeons and 377 members of the public were retrieved ( $n=383$ ). The general public demonstrated a significant preference for the oval incision in all five parameters. There was no preference identified among surgeons.

**CONCLUSION:** This study provides evidence that the general population prefers the aesthetics of the oval umbilicoplasty incision, which contrasts with the lack of preference identified within this group of plastic surgeons. Crowdsourcing has proven an effective tool in surveying the general population, which will enhance the research of post-operative aesthetics in plastic surgery.

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## DOES FAT GRAFTING INFLUENCE POSTOPERATIVE EDEMA IN ORTHOGNATHIC SURGERY?

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**PURPOSE:** Autologous fat grafting is a useful adjunctive procedure to orthognathic surgery and may also confer anti-inflammatory properties. The purpose of this study is to answer the clinical question: among patients undergoing orthognathic operations, what are the effects of fat grafting on facial edema (magnitude, duration and rate of decrease)?

**METHODS:** A retrospective cohort study was performed. 3D photos (Canfield, Fairfield NJ) from preoperative and a series of post-procedure time-points were analyzed. The data set was divided into a fat grafted cohort and a non fat grafted